

**Commonwealth of Kentucky
Division for Air Quality**

RESPONSE TO COMMENTS

ON THE TITLE V DRAFT PERMIT V-05-025 Revision 2

Griffin Industries, Inc.

4221 Alexandria Pike

Cold Spring, KY 41076

December 19, 2006

Timothy J. Rust, Reviewer

SOURCE I.D. #: 21-141-00026

SOURCE A.I. #: 2753

ACTIVITY #: APE20060001

SOURCE DESCRIPTION:

Griffin Industries, Inc. owns and operates a rendering facility in Russellville Kentucky, Logan County. The facility processes inedible animal byproducts, dead stock, and spent restaurant cooking oils to manufacture final products including meat and bone meal, poultry meal, tallow and yellow grease. These final products are typically used as ingredients in the agriculture feed industry. The major emission sources at this facility includes Emission Units 01 and 02 (EU 01 & EU 02), identical 50.2 mmBtu/hr, 1200 BHP Coal Master steam boilers each permitted to burn Fuel Oils, Recycled Cooking Oil, and On-Spec Used Oil; and EU 03, the rendering process line and finish product handling that includes a scrubber system for particulate and odor control. The Division for Air Quality received an application on June 26, 2006 for a revision to their existing Title V operating permit V-05-025 Revision 1. Griffin is proposing the construction of three new custom built steam boilers and of a new process building that will house two new rendering processing lines, a wastewater evaporator, and a finish product equipment. The new major emission sources will include emission units 04, 05 and 06 (EU 04, EU 05, and EU 06), three identical 50.2 mmBtu/hr (1200 BHP Hurst) steam boilers each capable of burning Residual and Distillate Fuel Oils, Recycled Cooking Oil, On-Spec Used Oil, and Natural Gas; emission unit 07 (EU 07), both rendering process lines, the wastewater evaporator, and a finish product handling. Vapors from both processing lines and the wastewater evaporator will be ducted to a new High-Intensity Scrubber System. This system includes a venturi scrubber which will control particulates and odors, followed by a packed tower scrubber, then ending with final treatment in a two-stage, cross-flow room air scrubber before being vented to the atmosphere. The final product handling system is equipped with a pneumatic transfer baghouse for particulate control.

PUBLIC AND U.S. EPA REVIEW:

On November 7, 2006, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The News Democrat & Leader* in Russellville, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Griffin Industries. Attachment A to this document lists the comments received and the Division's response to each comment. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit. The U.S. EPA has 45 days to comment on this proposed permit.

ATTACHMENT A

Response to Comments

Comments on Griffin Industries, Inc. Revised Draft Title V Air Quality Permit submitted by Mr. F. Michael Schmidt, Corporate Environmental Coordinator for Griffin Industries, Inc.

Section B –Emission Points, Emissions Units

Emissions Units 01 & 02

2. Emissions Limitations

Comment 1.

- a) This condition states that “sulfur dioxide emissions shall not exceed 1.16 lbs/mmBtu actual heat input each, based on a three-hour rolling average.” The regulation cited: 59:015 5.1(c) does not mention a “three-hour rolling average”. Griffin asks that any reference to a three-hour rolling average be deleted as it will be difficult to demonstrate compliance with each three-hour average for the purpose of compliance certification.
- b) See notes above. 59:015 4.1(c) does not mention a “three-hour rolling average”.

Division’s response: The averaging period listed with the emissions limitations correspond with the data averaging requirements of the Reference Test Methods listed in 401 KAR 51:015 Section 8 used to demonstrate compliance with each respective emission limit. In the case of Sulfur Dioxide emissions where fuel oil sampling or certified fuel analysis is allowed to assure compliance with standard, the Division believes that simply calculating emissions from fuel usage and operating hours can demonstrate that the standard will not be exceeded under any averaging period; no changes made.

4. Specific Monitoring Requirements

Comment 2.

- a – f) These conditions come from the Title V Permits Manual that is incorporated into the regulation by reference. Griffin asks that they be marked “State Enforceable Only”?

Division’s response: “State Enforceable Only” applies to regulations applicable in the jurisdiction of the Commonwealth of Kentucky only. The monitoring requirements referenced by 401 KAR 52:020 Section 26 are EPA SIP approved for issuing Title V permits per 40 CFR part 70 or 71 and are not “State Only Enforceable”; no changes made.

Comment 3.

- f) Griffin asks that the last sentence of this requirement be changed to read: “...Reference Method 9 and if visible emissions are greater than 20% opacity initiate an inspection of the equipment for any necessary repairs.”

Division’s response: This request was already included in the Draft permit.

5. Specific Recordkeeping Requirements

Comment 4:

- c) This condition states: "...monthly calculations of sulfur dioxide emitted from the recycled oil and natural gas shall be calculated and recorded." Griffin believes that this should read: "...monthly calculations of sulfur dioxide emitted from the recycled cooking oil and natural gas..." Griffin asks that this change be made to eliminate any confusion that may be caused by the use of the term "recycled oil".

Griffin also asks why must we do monthly calculations of SO₂ from burning recycled cooking oil and natural gas for this boiler if conditions 2.a. states that "Compliance with the sulfur dioxide standard is assured while burning natural gas or recycled cooking oil."? Monthly calculations for PSD purposes are required in condition 3 of Section D

Division's response: The term "cooking" has been added as requested. The Division acknowledges that the monthly sulfur dioxide calculations are for PSD purposes and are not required to demonstrate compliance with the unit specific sulfur dioxide standard while burning these fuels. However, the Division would like these calculations made on a per unit basis.

Emissions Units 03 – Existing Rendering Process

2. Emissions Limitations

Comment 5:

- a) The first sentence of this condition states that: "...each unit shall have emissions of particulate matter less than or equal to 10.9 lbs/hr, based on a three-hour average." This contradicts the third sentence of this condition that uses the process weight rate calculation to determine the particulate limit. Using this equation results in a limit of 28.33 lbs/hr. For this reason Griffin asks that the first sentence be deleted. Also, the regulation cited: 59:010 Section 3(2) does not mention a "three-hour average". Griffin asks that any reference to a three-hour average be deleted as it will be difficult to demonstrate compliance with each three-hour average for the purpose of compliance certification.

Division's response: In the permit application, Griffin did not choose to artificially limit annual production for any of the process operations which in theory could produce unlimited emissions. As a synthetic minor source, the permit must be conditioned to provide for reasonable assurance that the major source thresholds will not be exceeded. This has been accomplished by Griffin supplying emission factors derived from representative stack testing and by the Division establishing a fixed upper range for the variable particulate emission rate. To remove this limit would require Griffin either to take operating limitations or complete a full PSD analysis, neither of which is desired by Griffin. The formulas in the permit are intended for calculating the emission rate limit up to this fixed upper range only, not beyond, therefore, it will not be removed or changed. Given the emission factors supplied by Griffin, they should have no problem meeting this upper PM limit at any of their production capabilities. Additionally, the averaging period listed with the emissions limitations correspond with the requirements of the Reference Test Methods listed in 401 KAR 51:010 Section 4 used to demonstrate compliance with each respective emission limit as has previously been explained in the response to comment 1.

4. Specific Monitoring Requirements

Comment 6:

- a & b) Griffin asks that these two conditions be deleted because condition 2.a. allows us to use the Butler PT performance test on the rendering process to demonstrate compliance. If we use the Butler performance test there is no need to monitor the processing rate nor the amount of materials processed for compliance purposes.

Division's response: The Division does not concur, no change made.

5. Specific Recordkeeping Requirements

Comment 7:

- a & b) Griffin asks that these two conditions be deleted for the reasons stated in 4 on the previous page. Condition 2.a. allows us to use the Butler PT performance test on the rendering process to demonstrate compliance, therefore monitoring and recordkeeping for the processing rate or the amount of materials processed is not necessary to demonstrate compliance.

Division's response: The Division does not concur, no change made.

7. Specific Control Equipment Operating Conditions

Comment 8:

- b) Griffin asks that this condition be deleted because it is the same as condition 5.b.

Division's response: Comment acknowledged, change made.

Emissions Units 04, 05 & 06 - Indirect Heat Exchangers

2. Emissions Limitations

Comment 9:

- c) This condition states that "particulate matter emissions shall not exceed 0.03 lbs/mmBtu actual heat input each, based on a three-hour rolling average." The regulations cited: 60:005 or 40 CFR 60.43c (e)(1) do not mention a "three-hour rolling average". Griffin asks that any reference to a three-hour rolling average be deleted as it will be difficult to demonstrate compliance with each three-hour average for the purpose of compliance certification.

Division's response: The averaging period listed with the emissions limitations correspond with the requirements of the Reference Test Methods listed in 401 KAR 60:005 Section 4 and Appendix A to 40 CFR part 60 used to demonstrate compliance with each respective emission limit as has previously been explained in the response to comment 1.

4. Specific Monitoring Requirements

Comment 10:

- h) Griffin requests that the last sentence of this requirement be changed to read: "...Reference Method 9 and if visible emissions are greater than 20% opacity initiate an inspection of the equipment for any necessary repairs."

Division's response: This request was already included in the Draft permit.

5. Specific Recordkeeping Requirements

Comment 11:

- c) This condition states: "...monthly calculations of sulfur dioxide emitted from the recycled oil and natural gas shall be calculated and recorded." Griffin believes that this should read: "...monthly calculations of sulfur dioxide emitted from the recycled cooking oil and natural gas..." Griffin asks that this change be made to eliminate any confusion that may be caused by the use of the term "recycled oil".

Griffin also asks why must we do monthly calculations of SO₂ from burning recycled cooking oil and natural gas for this boiler if conditions 2.b. states that "Compliance with the sulfur dioxide standard is assured while burning natural gas or recycled cooking oil."? Monthly calculations for PSD purposes are required in condition 3 of Section D.

Division's response: The term "cooking" has been added as requested. See response to Comment 4.

Emissions Units 07 - Rendering Process #2, #3

2. Emissions Limitations

Comment 12:

- a) The first sentence of this condition states that: "...each unit shall have emissions of particulate matter less than or equal to 10.9 lbs/hr, based on a three-hour average." This contradicts the third sentence of this condition that uses the process weight rate calculation to determine the particulate limit. Using this equation results in a higher limit. For this reason Griffin asks that the first sentence be deleted. Also, the regulation cited: 59:010 Section 3(2) does not mention a "three-hour average". Griffin asks that any reference to a three-hour average be deleted as it will be difficult to demonstrate compliance with each three-hour average for the purpose of compliance certification.

Division's response: See Response to Comment 5.

4. Specific Monitoring Requirements

Comment 13:

- a & b) Griffin asks that these two conditions be deleted because condition 2.a. allows us to use the Butler PT performance test on the rendering process to demonstrate compliance. If we use the Butler performance test there is no need to monitor the processing rate nor the amount of materials processed for compliance purposes.

Division's response: The Division does not concur, no change made.

5. Specific Recordkeeping Requirements

Comment 14:

- a & b) Griffin asks that these two conditions be deleted for the reasons stated in 4 above. Condition 2.a. allows us to use the Butler PT performance test on the rendering process to demonstrate compliance, therefore monitoring and recordkeeping for the processing rate or the amount of materials processed is not necessary to demonstrate compliance.

Division's response: The Division does not concur, no change made.

7. Specific Control Equipment Operating Conditions

Comment 15:

- b) Griffin asks that this condition be deleted because it is the same as condition 5.b.

Division's response: Comment acknowledged, change made.

Section F – Monitoring, Recordkeeping, and Reporting Requirements

Comment 16:

Condition 8. Griffin asks that this condition be marked “State Enforceable Only”.

Condition 11. Griffin asks that this condition be marked “State Enforceable Only”.

Division's response: “State Enforceable Only” applies to regulations applicable in the jurisdiction of the Commonwealth of Kentucky only. The testing and reporting requirements referenced by 401 KAR 52:020 Section 26 are EPA SIP approved for issuing Title V permits per 40 CFR part 70 or 71 and are not “State Only Enforceable”; no changes made.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.